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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 10/674,647 | 09/30/2003 | Kwang Su Choe | YOR920030293US1 (16818) | 4796 |
| 7590 12/04/2008 | | | | |
| Steven Fischman, ESQ. Scully, Scott, Murphy and Presser 400 Garden City Plaza Garden City, NY 11530 | | | | |
| EXAMINER | | | | |
| PADGETT, MARIANNE L | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1792 | | | | |
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| 12/04/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

| | |
|--|------------------------------------|
| Application No. 10/674,647 | Applicant(s) CHOE ET AL. |
| Examiner MARIANNE L. PADGETT | Art Unit 1792 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 November 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☒ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____
Claim(s) objected to: _____
Claim(s) rejected: 1-11 and 13-25
Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____

/Marianne L. Padgett/
Primary Examiner, Art Unit 1792

Continuation of 3. NOTE:

(1) The blanket implantation of oxygen ions to a uniform depth is a new issue, in that while blanket implantation was previously considered (claim 14), "uniform depth" was not & no disclosure or definition of uniform depth was found in the original specification. The hand drawn cross-sectional illustration of the layered substrata figure 2C, cannot be considered to provide details or support or definition for uniform thickness. Furthermore, in paragraph [0012] applicants have defined "uniform" for the entire specification to always mean "a buried oxide region have been a continuous interface with a Si-containing over layer as well as the underlying Si-containing substrate wherein the variation of thickness across the entire surface is less than 30% of the total thickness of the buried oxide layer", thus prohibiting any clear meaning for "uniform" when used in combination with "depth" of oxygen ion implantation. Thus, the "uniform depth" amendments in the independent claims & paragraph [0037] raised question of new matter, as well as being new issues.

(2) The amendment to paragraph [0048] raises the issue of whether or not this amendment broadens the scope of the original disclosure, thus introducing new matter, by broadening the disclosure of the embodiment from removing excess dopant hat were ion implanted, to generic removal of excess dopant species no matter where they came from.

(3) The effect of a sequential annealing step in hydrogen reducing dopant levels within the SOI structure is a new issue in that it has not been previously claimed, thus required to be examined with respect to prior art. Note this also requires consideration with respect to the broadened disclosure of [0048].

Continuation of 5. Applicant's reply has overcome the following rejection(s):

Aside from above new issue/new matter considerations, the proposed amendment appear to remove first & second paragraph rejections of sections 1 & 3 of the action mailed 10/1/08.

Continuation of 11. does NOT place the application in condition for allowance because:

Above new issues require further consideration, for example, it must be considered what is meant by "uniform depth", which is present neither in original claim 14, nor in [0037], and could mean all ions are implanted to be approximately the same depth, or a range of depths is approximately the same where implantation occurs, etc., and further what scale uniform is to be considered on (microscopic, macroscopic, etc.) is not known.

With respect to the prior art, Bendernagel et al. (518), while teaching masking as one embodiment that may be employed with the ion implantation of oxygen, does not require that masking or patterning necessarily be employed, specifically noting in column 9, lines 62-64, pointed out by applicants, that "... ion implantation process wherein ions are implanted only into predetermined areas...", which encompasses selection of an entire surface area, selectively deposited to a desired depth, such as in their claim 14(c) "ions into predetermined areas... implant regions at or near said interface", which may be considered to read on possible meanings of uniform depth. Alternatively, if one considers predetermined area not to necessarily encompass blanket implantation, it must be further considered whether or not discontinuous patterning versus blanket implantation is an obvious difference, or has some unexpected or unobvious significance, which is not apparent from equivalently taught alternative options of blanket & pattern of [0037]. Also, its noted that Bendernagel et al. in column 9, lines 40-50, teach hydrogen annealing for the claimed purpose & after oxygen annealing, thus while this amendment to the hydrogen annealing fixes 112 issues, it is a limitation covered by this reference.

/MLP/
12/1-2/2008